RECENT LITERATURE.

Coues's 'Key to North American Birds,' Fifth Edition.'—" The present work constitutes the completion of Dr. Coues' life-long labors on behalf of the science of ornithology. In preparing it for publication the publishers have suffered extraordinary expense, difficulty, and delay by the loss of Dr. Coues' assistance in the proof-reading and illustrating of the book. The manuscript was finished but shortly before his death, and though fortunately complete in this form, was left in such shape as to present almost insuperable difficulties to the compositor or proof-reader, who lacked the author's direction and supervision" (Publisher's Preface, p. iii).

About four years elapsed between the death of Dr. Coues and the appearance of the Fifth Edition of the 'Key.' Doubtless if Dr. Coues had lived to see the work through the press, and it could thus have received his final touches in the proof, it would not have been materially different from what it is at present, but it must have undergone many slight modifications, and have been left fully abreast of the subject, instead of four years behind, as now. The publishers, under the circumstances, were most fortunate in securing the services of Mr. J. A. Farley, to superintend the carrying of the work through the press, and their acknowledgment of their own and the reader's indebtedness to the "painstaking care,... scholarly zeal and conscientious spirit of fidelity and accuracy" with which he performed the task, is most certainly a deserved tribute to his editorial skill and care.

¹ Key | to | North American Birds. | Containing a concise account of every species of Living and Fossil | Bird at present | known from the Continent north of the Mexican and United States Boundary, inclusive of Greenland and Lower California. | With which are incorporated | General Ornithology: | an outline of the Structure and Classification of Birds; | and | Field Ornithology, a Manual of collecting, preparing, and preserving Birds. | The Fifth Edition, (entirely revised) | exhibiting the Nomenclature of the American Ornithologists' Union, and including | descriptions of additional species. | In Two Volumes. | Volume I. | By Elliott Coues, A. M., M. D., Ph. D., | Late Captain and Assistant Surgeon U.S. Army and Secretary U.S. Geological Survey; Vice-President of the American | Ornithologists' Union, and Chairman of the Committee on the Classification and Nomenclature of North American Birds; Foreign Member of the British Ornithologists' Union; Corresponding Member of the Zoölogical Society | of London; Member of the National Academy of Sciences, of the Faculty of the National | Medical College, of the Philosophical and Biological Societies of Washington. | Profusely illustrated. | [Vignette.] Boston: | Dana Estes and Company. | 1903.— Roy. 8vo, Vol. I, pp. i-xli + 1-535, col. frontispiece, portrait of author, and text figs. 1-353; Vol. II, pp. i-vi + 537-1152, col. frontispiece, and text figs. 354-747.

The 'Key' was first brought out in 1872 (1st ed.); a revised and greatly enlarged edition (2d. ed.) appeared in 1884, so different from the first as to be essentially a new work. There was a reissue of this, printed from the same plates (3d. ed.), in 1887, with the addition of an Appendix; and another reprint from the same plates (4th ed.) in 1890, with the addition of a second Appendix. The present (5th) edition (Dec. 1903), with the systematic portion rewritten and greatly augmented, is thus in reality only the second revised edition of the original 'Key' first issued in 1872. The last edition is so radically different from the second and subsequent reprints that it is practically a new work. While the plan and general make-up are the same, and while Part I, 'Field Ornithology,' and the greater part of Part II, 'General Ornithology,' are textually the same, Part III, the 'Systematic Synopsis,' constituting the main body of the work, is wholly rewritten and greatly enlarged; the classification and arrangement are somewhat altered, and the nomenclature is revolutionized. to conform with that of the A. O. U. Check-List, the author, when necessary, often waiving his own opinions and preferences for the sake of conformity with the Check-List. The change in the number and character of the illustrations is also conspicuous, many of those used in the earlier editions having been discarded and hundreds of new ones added. most of them drawn expressly for the work by Mr. Fuertes, the general excellence of which is thus sufficiently assured. In consequence of the addition of about 250 pages of new matter, the 'Key' now appears in two volumes (continuously paged) instead of one, which, from the point of convenience for the user, is greatly to be regretted. If the same weight of paper had been used as in the 2d-4th editions the increase in bulk, in a book already so large, would not have been a material disadvantage, and would have been more than offset by the convenience of having the index always at hand instead of at the end of a second volume.

Volume I opens with a new frontispiece, a beautifully colored plate of the Starling, by Fuertes, in place of the former colored illustration of the 'Anatomy of the Pigeon.' The 'Publisher's Preface' is followed by the prefaces to the fourth and third editions, and the 'Historical Preface' (pp. xi-xxx, which includes the preface to the second - 1884 - edition), all naturally without change. Next stands the contents, followed by a portrait of the author, and Mr. D. G. Elliot's memorial address, both from 'The Auk' for January, 1901. Part I, 'Field Ornithology' (pp. 1-58), is reprinted without change. In Part II, 'General Ornithology' (pp. 59-241), the first forty-four pages have been reset, to admit of various minor changes, partly for literary improvement, partly for needed changes in technical names, and partly for the insertion of some six pages of wholly new matter, including a characteristic paragraph (p. 80) on the A. O. U. Code of Nomenclature. Pages 82-89, the section on 'The Feathers or Plumage,' have been rewritten and much new matter added, while pp. 92-94 are also mostly new, and include about two pages of new text on 'Aptosochromatism,' much of which is positively erroneous and had better have been omitted. Dr. Coues invented the term 'aptosochromatism,' and was peculiarly sensitive to criticism of its significance and use, as from time to time defined and applied by him, he finally looking upon such criticism almost as a personal grievance. This new exploitation of the subject abounds in positive misstatements and erroneous inferences.

Pages 113-235 are apparently from the original plates, without change. The 'Artificial Keys' and 'Tabular View' (pp. 236-241) have been recast and considerably modified, through changes in the names of groups and the admission of one new order, 6 new suborders, 7 new families, and the reduction of the subfamilies from 77 to 71, through the raising of 6 subfamilies to the grade of families. This of course implies considerable change in the classification followed in Part III, in comparison with previous editions.

Part III, 'Systematic Synopsis of North American Birds,' has been rewritten and greatly altered, not only through the admission in their proper sequence of the many species and subspecies added to the North American list of birds during the sixteen years between 1884 and 1900, but through many changes in classification and nomenclature involving the status of subgeneric and generic groups, as well as the status and relationships of the higher groups. As an illustration of the general character of these changes, we may take the family Turdidæ. In the 1884, and later editions down to the present, it included six subfamilies, as follows: Turdinæ, Miminæ, Cinclinæ, Saxicolinæ, Regulinæ, and Polioptilinæ. In the present edition the Turdidæ include the two subfamilies Turdinæ (= Turdinæ, 1884), and Myiadestinæ, formerly placed under Ampelidæ; while, of the other subfamilies, Miminæ is transferred to the Troglodvtidæ; Cinclinæ is raised to the rank of a family; Saxicolinæ is merged in Turdinæ; Regulinæ and Polioptilinæ are placed in a separate family Sylviidæ. There are other similar changes in other families of the Passeres, involving new associations of groups. Among changes of names, it may be noted that Sylvicolidæ now becomes Mniotillidæ, only one among many changes in the names of higher groups, including those of all grades from subfamily to order.

To continue the comparison further, all of the species included in the Turdinæ of the earlier editions were placed under the single genus Turdus, divided into the three subgenera Turdus, Merula, and Hesperocichla. In the present edition Merula, Hesperocichla, Turdus, and Hylocichla stand as full genera, and Saxicola, Sialia, and Cyanecula are transferred from other associations to the Turdinæ. The species and subspecies formerly placed under Turdus are now distributed among four genera, and the number and status of the species and subspecies are in conformity with the A. O. U. Check-List as it stood at the time the revision of the manuscript for the new 'Key' was completed.

When the 1884 'Key' was published there was no A. O. U. 'Check-List of North American Birds,' nor any A. O. U. 'Code of Nomenclature.' It therefore reflected the close of a preceding period in the history of North American ornithology; and unfortunately continued to do so, as regards both classification and nomenclature, until the publication of the present revised edition. It is therefore gratifying to find how closely this new edition of a work that has done so much for the younger generation of ornithologists accords in both these features with the latest edition of the Check-List and its supplements down to the year 1899. There are discrepancies here and there between the two in the matter of higher groups—as under the 'Order Picariæ,' for example—and occasionally in the recognition and designation of species and subspecies, but they are surprisingly few, in view of the author's declared independence in matters of expert opinion. (See Preface to the third edition, p. ix of the present work.) Apparently very few forms recognized by the A. O. U. Committee prior to 1900 are here omitted, while many the Committee had declined to recognize, or had not yet passed upon, are also admitted. A large number of groups rated by the A. O. U. Committee, down to the year 1900, as subgenera are given full generic rank, including not only those thus raised by the Committee itself in 1903, but others, many of which the Committee will doubtless soon accord the rank of genera. A few subgenera additional to those of the A. O. U. Check-List are also recognized, of which four appear to be new, namely: Stellerocitta (p. 495), a subgenus of Cyanocitta for the Steller's Jay group; Sieberocitta (p. 499) as a subgenus of Aphelocoma for the Arizona Jay group; Dilopholieus (p. 963) and Viguacarbo (p. 965) as subgenera of Phalacrocorax for, respectively, the Double-crested Cormorant and the Mexican Cormorant.

In respect to matters of nomenclature, and recent additions to the list of North American birds, the new 'Key' has been brought down to date through Mr. Farley's carefully prepared 'Appendix' (pp. 1145-1152), in which he has given all the additions made in the Tenth, Eleventh, and Twelfth Supplements to the Check-List (July, 1901-July, 1903), and arranged, in parallel columns, all changes from the nomenclature of the 'Key' made by the A. O. U. Committee since Dr. Coues finished his work on the manuscript.

The additions in the text of Part III, aside from those above noted, consist in the amplification of many of the diagnoses; many essential modifications in the statement of ranges, in conformity with our increased knowledge of such matters; the addition of bibliographical references, and much critical and historical comment on questions of nomenclature—matters almost wholly excluded from former editions; the addition of many—perhaps too many—vernacular synonyms; and the more elaborate and often greatly extended characterizations of the higher groups. These are considered from the point of view of the birds of the world, and the relationships of their different components are stated with masterly clearness and comprehensiveness. In illustration of this the 'Order Picariæ' may be especially cited, where (pp. 537–543) the group as a whole and its subdivisions are considered at length. Although he retains the group, he says: "I have no faith whatever in the integrity of

any such grouping as 'Picariæ' implies; but if I should break up this conventional assemblage, I should not know what to do with the fragments;.... The A. O. U. ignores the major group, and presents instead three orders—Coccyges, Pici, and Macrochires. With this procedure I have no quarrel, as the three are precisely coincident with my three suborders, Cuculiformes, Piciformes, and Cypseliformes."

Part IV, 'Systematic Synopsis of the Fossil Birds of North America' (pp. 1087-1097), brings this important feature of the work also down to the close of the year 1899. An index of 48 pages, three columns to the page, completes this masterpiece of mature ornithological work, which alone would long keep green the memory of its gifted author.

In the way of criticism, we note with some surprise the fact that the matter relating to the general anatomy of birds is left as published in 1884, notwithstanding the many important contributions to the subject since that date. We cannot help feeling that if Dr. Coues had lived to carry the new 'Key' through the press this part of the work would also have received due revision at his hands. In regard to the publishers' share in the work, they have certainly been liberal in their expenditure for illustrations, but unfortunately the paper selected for the work is poorly adapted for the reproduction of half-tones in the text, and many of Mr. Fuertes's beautiful drawings have suffered sadly in the printing. Also, as already said, it is a decided inconvenience to have the 'Key' issued as a two-volume work, and it is to be hoped that when the next edition is called for it will be found practicable to use both a lighterweight and a smoother-finished paper, so as to give greater sharpness to the half-tones and at the same time render it practicable to issue the work in a single volume. If the two volume form should seem necessary, it would be a great convenience to have the index inserted in both volumes.

In regard to the 'Key' itself, it is a well-known and an old favorite, whose thirty years of practical usefulness have won for it unstinted and well-merited praise, and in its new form will prove for many years to come a boon alike to the amateur and the professional student of North American birds. The 'Key' of 1872 was an innovation and an experiment in ornithological literature; its practicability was evident from the outset, and it proved to be the forerunner of almost numberless successors of 'key' manuals in various departments of zoölogy. The author's final revison of this greatest of his many contributions to ornithological literature will make a new generation of bird students his debtors and admirers.— J. A. A.

Chapman's 'Color Key to North American Birds.' 1—The sole purpose of the present book, according to the author, is "the identification of

¹Color Key to | North American Birds | By | Frank M. Chapman | Associate Curator of Ornithology and Mammalogy | in the American Museum of